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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/691,062   | 10/22/2003  | Rainer Bottesch      | SCH-00076              | 6104             |
| 7590 11/01/2005<br>Warn, Burgess & Hoffmann, P.C.<br>P.O. Box 70098<br>Rochester Hills, MI 48307 |             |                      | EXAMINER<br>HAN, JASON |                  |
|  |             |                      | ART UNIT<br>2875       | PAPER NUMBER     |

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/691,062 | <b>Applicant(s)</b><br>BOTTESCH ET AL |  |
|                              | <b>Examiner</b><br>Jason M. Han      | <b>Art Unit</b><br>2875               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to Claims 1 and 3-27 have been considered but are moot in view of the new ground(s) of rejection.

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The following claims have been rejected in light of the specification, but rendered the broadest interpretation as construed by the Examiner [MPEP 2111].

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### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. With regards to Claim 18, it remains unclear how "light emitted from an LED in front of said light-directing element passes through said light-directing element and contacts said annular reflector", while at the same time "light emitted from an LED positioned between said [SAME] annular reflector and behind said [SAME] light-directing element contacts said [SAME] annular reflector". Claims 19-20 stand rejected due to dependency.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 7-9, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by West et al. (U.S. Patent 6598998).
5. West discloses a lamp including:
  - A housing [Figures 5A, 12: (40)] in which at least one light source [Figures 5A, 12: (52)] is arranged, wherein the at least one light source is an LED [Column 3, Lines 27-41];
  - A light-conducting element [Figure 5A: (44); Figure 12: (144)] having a double-cone shape, which surrounds the LED, causing light emitting from the LED to be emitted in a lateral direction; and

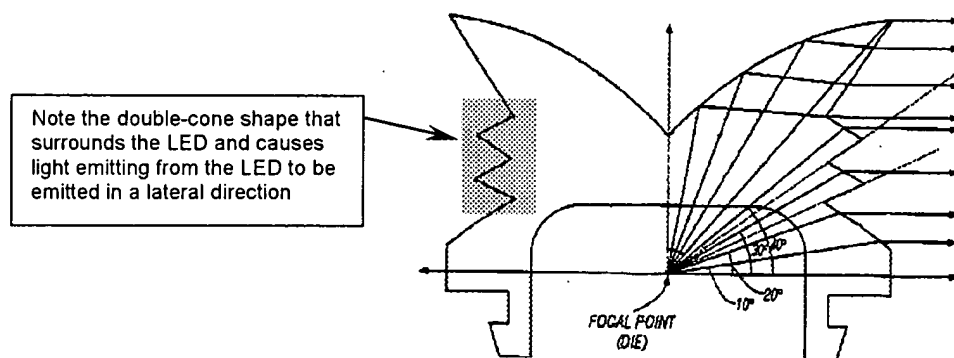


FIG. 6E

- At least one reflection part [Figure 12: (102)] associated with the light source, wherein the at least one reflection part adjoins and surrounds the LED in the same place and has a height that is less than or equal to the LED.
6. With regards to Claim 3, West discloses the reflection part further comprising an annular reflector [Figure 12: (102)].
  7. With regards to Claim 4, West discloses the reflector [Figure 12: (102)] comprising a parabolic configuration.
  8. With regards to Claim 5, West discloses the LED [Figure 5A: (52); Figure 12: (144)] being arranged at the focus of the reflector.
  9. With regards to Claim 7, West discloses the reflection part including a light-directing element [Figure 12: (102); Column 7, Lines 8-29].
  10. With regards to Claim 8, West discloses the light-directing element having a circular outline and at least one light exit side [Figure 12: as defined by the edges of (102)].
  11. With regards to Claim 9, West discloses the light-directing element including a central aperture in which the LED is located [Figure 12: (40)].
  12. With regards to Claim 13, West discloses the outside of the light-conducting element being provided with at least one reflection layer [Figure 12: (120)], applied by vapor deposition [Column 7, Lines 23-27].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 6, 10-12, and 14-17, 21-23, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (U.S. Patent 6598998) as applied to Claims 3, 7, and 1 respectively above, and further in view of Desai (U.S. Patent 6773154).

14. With regards to Claim 6, West discloses the claimed invention as cited above, but does not specifically teach the reflector being provided with optics located on a reflector surface.

Desai teaches a lamp [Figure 1: (110)] including a reflector [Figure 1: (106)], wherein optics [Figure 1: (108)] are located on the reflector surface.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp of West to incorporate the optics of Desai onto the reflector, so as to provide greater control and a desired optical effect on the illumination

15. With regard to Claims 10-12, West in of Desai discloses the claimed invention as cited above, whereby West does not specifically teach the light-directing element including reflection surfaces reflecting the light emitted by the LED to a light exit surface (re: Claim 10), said reflection surfaces being provided coaxial to the LED (re: Claim 11), nor teaches said reflection surfaces being provided on an underside of the light-directing element on a side opposite of the light exit surface (re: Claim 12).

However, Desai teaches a light-directing element [Figure 3: (106)] with reflection surfaces [Figure 3: (108)] provided coaxially to the LED lamp and on an underside of the light-directing element on a side opposite a light exit surface [Figure 3: (102)].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp of West to incorporate the light-directing element with multiple reflection surfaces of Desai in order to provide a desired optical effect on the illumination. In this case, multiple reflection surfaces could provide a greater uniform distribution of the light and collimate the illumination towards a desired direction.

16. With regard to Claims 14-17, West in view of Desai discloses the claimed invention as cited above, whereby West does not specifically teach at least two reflection parts being arranged closely spaced with one behind another in the beam direction of the LED of each said reflection part (re: Claim 14), wherein one reflection part including an annular reflector and the other part including a light-directing element (re: Claim 15), said annular reflector being located ahead of the light-directing element in beam direction (re: Claim 16), nor teaches the annular reflector including a passage opening to admit the rays of light to the light-directing element (re: Claim 17).

However, Desai teaches at least two reflection parts including an annular reflector [Figure 3: (106)] arranged ahead of a light-directing element [Figure 3: (102)] in beam direction, wherein the annular reflector includes a passage opening to admit the rays of light to the light-directing element.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp of West to incorporate the annular reflector and light-directing element of Desai to provide a desired optical effect with respect to the illumination, whereby multiple optical components offer greater flexibility than a single optical component.

17. With regard to Claims 21-23, West in view of Desai discloses the claimed invention as cited above, whereby West does not specifically teach at least two light-directing elements arranged one behind the other in beam direction (re: Claim 21), two or more reflection surfaces configured in the anterior light-directing element so that the rays of light reflected from the rearward light-directing element enter the anterior light-directing element in the region between the two or more reflection surfaces (re: Claim 22), nor teaches the light rays of the rearward light-directing element impinging perpendicularly on the underside of the anterior light-directing element (re: Claim 23).

However, Desai teaches at least two light-directing elements including an anterior one [Figure 1: (102)] having two or more reflection surfaces [Figure 1: (104)] arranged ahead of the rearward one [Figure 1: (106)], whereby rays of light reflect off the rearward light-directing element and enter/impinge perpendicularly on the underside of the anterior light-directing element in the region between the two or more reflection surfaces.

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp of West to incorporate the annular reflector and light-directing element of Desai to provide a desired optical effect with respect to the illumination, whereby multiple optical components offer greater flexibility than a single optical component.

18. With regard to Claims 26-27, West in view of Desai discloses the claimed invention as cited above, whereby West does not specifically teach the LEDs of the



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reflection parts arranged one behind another emitting the same (re: Claim 26) or different (re: Claim 27) chromatic hues.

However, Desai teaches, "A typical LED lamp provides an intense beam of colored light [Column 1, Lines 48-49]."

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the lamp of West to incorporate the colored light teaching of Desai, whereby an LED lamp(s) could be used to produce different or same colored hues to enhance aesthetic appeal or warning.

19. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (U.S. Patent 6598998) as applied to Claim 1 above, and further in view of Schöniger et al. (U.S. Patent 5136483).

West discloses the claimed invention as cited above, but does not specifically teach the reflection part having a cooling member located on the underside thereof (re: Claim 24), nor said cooling member at least partially covering the underside of the reflection part (re: Claim 25).

Schöniger discloses a reflector [Figure 3: (16)] with cooling members located on and partially covering the underside thereof [Figure 3: (19)].

It would have been obvious to one ordinarily skilled in the art at the time of invention to modify the reflection part of West to incorporate the cooling members of Schöniger to ensure proper heat dissipation for the LED and illumination efficiency.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

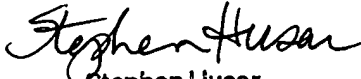
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (10/19/2005)

  
Stephen Husar  
Primary Examiner